Georgia Department of Natural Resources
205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
Harold F. Reheis, Assistant Director
Environmental Protection Division

December 29, 1986

Mr. Jack E. Ravan
Regional Administrator
U. S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

Re: Georgia Power Company
Plant Scherer
NPDES Permit No. GA 0035564

Dear Mr. Ravan:

We are responding to your November 4, 1986 letter regarding our September 16, 1986 draft NPDES permit for Plant Scherer. After several discussions with Mr. Charles Kaplan of your staff and Mr. George Guill of Georgia Power Company, we have elected to implement alternative No. 1 of your letter.

Georgia Power Company has indicated that sequential discharge of cooling tower/condenser chlorine will be done during normal biofouling control, rather than simultaneous discharge as proposed in the company's May 5, 1986 letter. This is a major change in their operating procedure and should eliminate your objection. Georgia Power will be requested to revise their discussion of chlorination practices to conform to the draft permit prior to issuance.

The enclosed draft permit is written with the intent of complying exactly with your requirements for alternative No. 1. In fact, several quotes or paraphrases from your November letter have been incorporated into the permit.

Please review this draft carefully within the bounds of your specific objection. In our October 8, 1986 meeting, we asked EPA to provide us with all specific objections, so that we could revise the proposed permit for the final time. EPA's November 4 letter was intended for this purpose. There should be no reason to raise objections or comments which were not included in your November 4 letter. We wish to issue this permit as written since alternative No. 1 allows strict adherence to the regulations without requiring immediate arbitrary installation of dechlorination. Toxicity reduction can be implemented gradually based on demonstrated need during the life of the permit.

Regarding outfall 03, the modification provision of Part II. B. 8. will enable adequate toxicity control and a separate special condition is not needed. Reductions in TRC discharge will be required if EPD documents TRC toxicity in the receiving water. This approach is consistent with our developing statewide strategy for controlling and abating TRC toxicity.

Finally, the public hearing requirements have been satisfied. This permit modification was initiated by Georgia Power on October 8, 1984 specifically to begin asiatic clam control in the service water. After extensive study and negotiation, it was decided that a new permit would be necessary. On August 15, 1985, a draft permit was prepared that was very similar to the enclosed one. Public notice was issued on August 30, 1985 and expired 30 days later with no comments being received. Therefore, we do not intend to repeat the public notice procedure.

If you have questions during your review of this latest draft, please do not hesitate to call.

Sincerely,

Harold F. Reheis, P.E.
Assistant Director

HFR:thk
Enclosure

cc: Georgia Power Company

Kaplan

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

NOV - 4 1986

REF: 4WM-FP

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Harold F. Reheis, P.E.
Assistant Director
Environmental Protection Division
Georgia Department of Natural Resources
205 Butler Street, S.E.
Floyd Towers East
Atlanta, Georgia 30334

RE: Georgia Power Co. - Plant Scherer Steam Electric Generating Station
NPDES No. GA0035564

Dear Mr. Reheis:

Under the authority of Section III.C.3. of the Georgia-EPA NPDES Memorandum of Agreement and the EPA regulations, 40 CFR Part 123.44, I am notifying you of EPA's formal objection to the proposed NPDES permit for Georgia Power Company, Plant Scherer (GA0035564). This proposed permit was enclosed with your letter of September 16, 1986, and was received in this office September 19, 1986. On October 8, 1986, EPA NPDES permit staff met with Messrs. Nolton Johnson and Tom Hopkins of your staff and discussed the remaining issues regarding the draft permit referenced above. The following objections, recommendations, and comments are presented as a result of our review of the permit and discussion on October 8, 1986.

Specific objections to the proposed permit and recommended actions necessary to eliminate the objections are as follows:

Outfall Serial Number (OSN) 01A - Cooling Tower Blowdown

Basis for Objection

Although the limitations for OSN 01A are consistent with 40 CFR 423 requirements, approval of the permittee's "need for increased chlorination demonstration" is inconsistent with 40 CFR 423.12(b)(8) and 423.13(c)(2), unless modified chlorine limitations are provided in the permit. We are objecting to the approval of the demonstration because proposed permit limitations which incorporate the demonstration have not been provided for our review and because the discussion of chlorination practices presented by the permittee is not an adequate/acceptable demonstration that the units cannot operate at or below the level of chlorination required by the effluent guidelines.

Actions Necessary to Eliminate the Objections

In order to eliminate our objections, one of the following alternatives must be incorporated into the permit. For all alternatives, a study must be required to demonstrate minimum practicable levels and periods of continuous chlorination for the plant service water systems to adequately control asiatic clams.

1. Guideline limitations of 0.2*/0.5** mg/l of free available chlorine (FAC) attributable to cooling tower/condenser chlorination (i.e. effluent concentration of FAC above that due to continuous service water system chlorination) be applied at each individual cooling tower blowdown point prior to combination. Time of total residual chlorine (TRC) discharge, attributable to tower/condenser chlorination be limited to two hours/day/unit. Simultaneous discharge of TRC be prohibited. Suitable monitoring be required at each tower blowdown point to demonstrate compliance with each of the above three conditions.

2. Limitations of 0.05*/0.125** mg/l of FAC be applied at a combined discharge point from all cooling tower blowdowns. (This limitation is derived by flow-weighting BPT/BAT guideline limitations.) Time of TRC discharge attributable to tower/condenser chlorination be limited to two hours/day at the combined discharge. (This is consistent with BPT/BAT requirements.) Suitable monitoring be required at the combined discharge point to demonstrate compliance with both of the above conditions. Simultaneous chlorination of all four tower/condenser systems would be permitted.

3. Limitation of 0.14 mg/l of TRC as an instantaneous maximum be applied at the combined discharge point for all cooling tower blowdowns. (This limitation is based on the proposed October 14, 1980 regulations and Development Document for dechlorinated effluents at steam electric power plants.) Time of TRC discharge attributable to tower/condenser chlorination be limited to two hours/day at the combined discharge. (This is consistent with BPT/BAT requirements.) Suitable monitoring be required at the combined discharge point to demonstrate compliance with both of the above conditions. Simultaneous chlorination of all four tower/condenser systems would be permitted.

Background

The effluent limitations for OSN 01A are consistent with 40 CFR 423 requirements. Part I of the proposed final permit establishes FAC limitations of 0.2*/0.5** mg/l at each individual cooling tower discharge. Additionally, Part III.B.4. limits the discharge of FAC and TRC to two hours/day/unit and does not allow more than one unit to discharge FAC or TRC at any one time unless the utility can demonstrate to the Director that the units in a particular location cannot (emphasis added) operate at or below this level of chlorination. The proposed permit requires that any demonstration be submitted to the Director within 90 days of the effective date of this permit.

* Average during any chlorine release period
** Instantaneous maximum

The EPD letter of September 16, 1986, referenced above, states that Georgia Power Company's discussion of chlorination practices, dated May 5, 1986, (subsequently referred to as "demonstration") will be approved as a demonstration of the need to simultaneously chlorinate for more than two hours per day. The letter further states that no changes to the limitations or other permit modifications will be necessary. EPD has not provided us with the proposed effluent limitations which address the demonstration, but has indicated they will use 0.2*/0.5** mg/l FAC limitations for the combined stream flow from all four towers, will waive the two hours/day/unit requirement, and will allow simultaneous chlorination of cooling tower/condenser systems. These limitations are inconsistent with the regulations. The 0.2*/0.5** FAC limitations are applicable to each individual cooling tower prior to combination.

The demonstration indicates that continuous chlorination of the plant service water systems is necessary for asiatic clam control and that simultaneous tower/condenser chlorination is desired. Cooling tower make-up water for all units is taken from the plant service water systems. The plant service water will be chlorinated April through October (depending on temperature), five days per month for 24 hours per day at 1.0 mg/l to control the occurrence of clams in the service water systems. If the service water is continuously chlorinated, cooling tower blowdown from all four units may contain detectable TRC for more than two hours per day. Additionally, the demonstration indicates that simultaneous chlorination of four tower/condenser systems would result in cost savings and would allow operating flexibility.

We concur that the permittee has demonstrated the need to continuously chlorinate the plant service water systems and, to the extent necessitated by this chlorination practice, to discharge chlorine from each cooling tower simultaneously and for more than two hours per day. However, further demonstration is needed to assure that 1.0 mg/l of chlorine is necessary to control clams and that continuous chlorination during the entire seven month period is necessary. With proper controls and operation, it is possible that continuous chlorination of the plant service water systems will not result in a detectable discharge of chlorine in the cooling tower effluents. In regard to the simultaneous chlorination and discharge of chlorine from the tower/condenser systems, we disagree that the permittee has demonstrated that it cannot operate in a manner consistent with BPT and BAT requirements of 40 CFR Part 423. Rather, the permittee has indicated it would be more desirable to simultaneously chlorinate, i.e. would result "in a net cost saving to the Company as well as allowing operating flexibility."

* Average during any chlorine release period
** Instantaneous maximum

In addition to the objections above, we offer the following comment:

For OSN 03, service water final discharge, we would recommend effluent limitations for TRC of 0.011 mg/l average and 0.038 mg/l maximum. The continuous discharge of TRC at levels proposed by Georgia Power Company (up to 1.0 mg/l without dechlorination) would be inconsistent with the state (narrative) water quality standards regarding toxicity (GA code 391-3-6.03-(5)(d)). The permittee has proposed to install dechlorination facilities for this outfall. This technology should achieve the EPA suggested TRC limitations. Therefore, we do not understand why the revised draft permit contains no limitations for TRC. In consideration of the meeting of August 12, 1986 and Georgia's development of a statewide strategy for controlling toxics, we will not object to the permit conditions for this outfall. We recommend a special condition be added to the permit to allow the incorporation of limitations deemed necessary by the statewide toxic control strategy.

The demonstration for the Scherer site indicates that the permittee proposes to install a dechlorination facility for OSN 01A. Dechlorination should yield a virtually undetectable level of FAC/TRC in the discharge. EPA staff will be happy to work with you and Georgia Power to develop an agreeable combined discharge FAC/TRC limitations for OSN 01A with simultaneous chlorination and dechlorination. We will be most happy to meet with you and your staff or otherwise provide any assistance necessary to resolve these issues. The OSN 01A issue must be resolved prior to permit issuance.

40 CFR Part 123.44 (e) and (h) provide that within ninety (90) days of receipt by a State of an EPA objection (to a draft or proposed permit), if the State does not resubmit a permit revised to meet our objections and if the State or any other party does not request a public hearing, the exclusive authority for issuance of the permit passes to EPA. The ninety (90) day period will start on your receipt of this letter. If a permit revised to meet our objections is not submitted and if a public hearing is not requested within that time, the exclusive authority to issue this permit will pass to EPA.

Sincerely yours,

Lee A. Dietrich, acting

Jack E. Ravan
Regional Administrator

cc. Mr. Dennis Ruddy

FISCAL YEAR 1987 NPDES PERMIT REVIEW
STATE: GA

FACILITY: Scherer Steam Electric Generating Station

NPDES # : GA0035564

APPLICATION _____ DRAFT ✓ FINAL _____

____ NEW

✓ MAJOR IND.

____ MAJOR MUN.

____ MINOR PRI.

____ MODIFICATION (circle one: Major Ind/Mun. or Minor Pri.)

ROUTING: 1. DATE/RECEIVED 1/6/87

2. UNIT CHIEF

3. ASSIGNED TO _____ DUE 1/16/87

4. UNIT CHIEF (If Problems)

5. PERMITS CLERK

6. FINALS (PCS then file), DRAFTS (file)

COMMENTS: This is not the draft permit submitted 12/29/86

ACTION TO BE TAKEN: _____

COMPLETED BY: _____ DATE: _____

PERMIT NO. GA 0035564

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.), hereinafter called the "Federal Act," and the Rules and Regulations promulgated pursuant to each of these Acts,

GEORGIA POWER COMPANY
P.O. BOX 4545
ATLANTA, GA 30302

is authorized to discharge from a facility located at

Scherer Steam Electric Generating Station
Georgia Highway 23
Juliette, Monroe County, Georgia 31406

to receiving waters

Berry Creek and Rum Creek to the Ocmulgee River

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on the date signed by the Director of the Environmental Protection Division.

This permit and the authorization to discharge shall expire at midnight, November 30, 1990.

Signed this _____ day of _____.

DRAFT

Director,
Environmental Protection Division

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning effective date and lasting through November 30, 1990, the permittee is authorized to discharge from outfall(s) serial number(s)01 - Detention Pond (I Pond) Final Discharge to Berry Creek; 01D - I Pond Bottom Drain

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day(lbs/day)		Other Units(Specify) (mg/l)		Monitoring Requirements		
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	-	90	1/Month	Grab	Final Discharge or Bottom Drain

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample at the final discharge to Berry Creek or at the bottom drain when discharging.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

During the period beginning effective date and lasting through November 30, 1990, the permittee is authorized to discharge from outfall(s) serial number(s) 01A-Cooling Tower Blowdown for Units 1, 2, 3 and 4. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day (lbs/day)		Other Units (Specify) (mg/l)		Monitoring Requirements		
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location(2)
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Free Available Chlorine (FAC)(1)	-	-	0.2(3)	0.5(3)	1/Week	Multiple Grabs	Blowdown Line
Total Residual Chlorine (TRC)(1)	-	-	-	120	1/Week	Multiple Grabs	Blowdown Line
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Blowdown Line
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Blowdown Line

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Multiple grab samples are to be collected during periods of FAC and TRC discharge.

(2) Samples are to be taken before the cooling tower blowdown combines with waste streams from other categorical sources. The discharge limitations apply to the individual cooling tower blowdown from each generating unit. See Part III B.4.

(3) In accordance with 40 CFR 423.11(k), the FAC average means the average over any individual chlorine release period. The FAC maximum is the instantaneous maximum which occurs ~~during any individual chlorine release period~~ at any time.

In accordance with 40 CFR 423.13(d)(3), the permittee shall certify every two years in the flow characterization study that no priority pollutant other than chromium or zinc is above detectable limits in this discharge.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

During the period beginning effective date and lasting through November 30, 1990,
the permittee is authorized to discharge from outfall(s) serial number(s) 01B - Ash Transport Water
(includes 02H Wastewater Basin Low Volume Waste)
Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location(
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	30	100	2/Month	Grab	Bleedoff
Oil and Grease	-	-	15	20	2/Month	Grab	Bleedoff

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Samples are to be taken upstream of the final detention pond (I Pond) at the ash transport water bleedoff line.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

During the period beginning effective date and lasting through November 30, 1990, the permittee is authorized to discharge from outfall(s) serial number(s) 02J - Settling Pond Emergency Overflow to Lake Juliette (Ash Transport Water).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day(lbs/day)		Discharge Limitations Other Units(Specify)		Monitoring Requirements		
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1).

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

During the period beginning effective date and lasting through November 30, 1990, the permittee is authorized to discharge from outfall(s) serial number(s) 02K - Units 1 and 2 Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes)
Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency (1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.(1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

During the period beginning effective date and lasting through November 30, 1990, the permittee is authorized to discharge from outfall(s) serial number(s) 02L - Units 3 and 4 Wastewater Basin Emergency Overflow to Lake Juliette (Low Volume Wastes).
Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency (1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease	-	-	15	20	2/Month	Grab	Overflow

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling. (1)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Monitoring for TSS, Oil and Grease, and pH is required only when an overflow is occurring.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

During the period beginning effective date and lasting through November 30, 1990
the permittee is authorized to discharge from outfall(s) serial number(s) 03 - Service Water Final Discharge to Lake Juliette.
Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day(lbs/day)		Other Units(Specify)		Monitoring Requirements		
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Temperature	-	-	-	-	1/week	Grab	(1)
Total Residual Chlorine (TRC)		-	-	-	1/week	Grab	Final Discharg

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) Temperature will be monitored and reported for the plant intake and the final discharge. The difference ("ΔT") between intake and discharge temperature shall be calculated and entered on the monitoring report.

EPD 2.21-2-2

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

During the period beginning effective date and lasting through November 30, 1990, the permittee is authorized to discharge from outfall(s) serial number(s) 04 and 05 - Units 1 and 2 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Lake Juliette.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency (1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O & G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine (FAC) (2)	-	-	0.2(3)	0.5(3)	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine (TRC)(2)	-	-	-	-	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

Same as 01A

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 2/month by grab sampling.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) TSS, O & G, and pH are required for basin cleaning waste discharges. FAC, TRC, chromium, zinc, and pH are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

(2) Multiple grab samples are to be collected during periods of FAC and TRC discharge. Also, see Part III B.4.

(3) In accordance with 40 CFR 423.11(k), the FAC average means the average over any individual chlorine release period. The FAC maximum is the instantaneous maximum which occurs during an individual chlorine release.

In accordance with 40 CFR 423.13(d)(3), the permittee shall certify every two years in the flow characterization study that no priority pollutant other than chromium or zinc is above detectable limits in these discharges.

DRAFT

EPD 2.21-2-2

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

During the period beginning effective date and lasting through November 30, 1990, the permittee is authorized to discharge from outfall(s) serial number(s) 06 and 07 - Units 3 and 4 Cooling Tower Basin Overflows/Basin Cleaning Wastes to Detention Pond (I Pond).
Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements		
	kg/day(lbs/day)		Other Units(Specify) (mg/l)				
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency(1)	Sample Type	Sample Location
Flow-m^3Day (MGD)	-	-	-	-	-	-	-
Total Suspended Solids (TSS)	-	-	30	100	2/Month	Grab	Overflow
Oil and Grease (O&G)	-	-	15	20	2/Month	Grab	Overflow
Free Available Chlorine(FAC)(2)	-	-	0.2(3)	0.5(3)	1/Week	Multiple Grabs	Overflow
Total Residual Chlorine(TRC)(2)	-	-	-	-	1/Week	Multiple Grabs	Overflow
Total Chromium	-	-	-	0.2	1/Quarter	Grab	Overflow
Total Zinc	-	-	-	1.0	1/Quarter	Grab	Overflow

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) TSS and O & G are required for basin cleaning waste discharges. FAC, TRC, chromium, and zinc are required for cooling tower overflow discharges. Stop log leakage is not reportable, but its flow and effluent characteristics should be discussed in the bi-annual flow characterization study.

(2) Multiple grab samples are to be collected during periods of FAC and TRC discharge. Also, see Part III B.4.

(3) In accordance with 40 CFR 423.11(k), the FAC average means the average over any individual chlorine release period. The FAC maximum is the instantaneous maximum which occurs during an individual chlorine release.

In accordance with 40 CFR 423.13(d)(3), the permittee shall certify every two years in the flow characterization study that no priority pollutant other than chromium or zinc is above detectable limits in these discharges.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

N/A

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

Note: EPD as used herein means the Division of Environmental Protection of the Department of Natural Resources.

C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous 3 months shall be summarized for each month and reported on an Operation Monitoring Report (Form WQ 1.45), postmarked no later than the 21st day of the month following the completed reporting period. The first report is due on
The EPD may require reporting of additional monitoring results by written notification. Signed copies of these, and all other reports required herein, shall be submitted to the following address:

Georgia Environmental Protection Division
Industrial Wastewater Program
205 Butler Street, S.E., Floyd Towers East
Suite 1070
Atlanta, Georgia 30334

3. Definitions

a. The "daily average" discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.

b. The "daily maximum" discharge means the total discharge by weight during any calendar day.

c. The "daily average" concentration means the arithmetic average of all the daily determinations of concentration made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during that calendar day.

d. The "daily maximum" concentration means the daily determination of concentration for any calendar day.

e. "Weighted by flow value" means the summation of each sample concentration times its respective flow in convenient units divided by the sum of the respective flows.

f. For the purpose of this permit, a calendar day is defined as any consecutive 24-hour period.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(g) of the Federal Act.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date, and time of sampling;

b. The dates the analyses were performed;

c. The person(s) who performed the analyses;

d. The analytical techniques or methods used; and

e. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Operation Monitoring Report Form (WQ 1.45). Such increased monitoring frequency shall also be indicated. The EPD may require more frequent monitoring or the monitoring of other pollutants not required in this permit by written notification.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained by the permittee for a minimum of three (3) years, or longer if requested by the State Environmental Protection Division.

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges or pollutants must be reported by submission of a new NPDES application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the EPD of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Water Protection Branch of EPD with the following information, in writing, within five (5) days of becoming aware of such condition:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

Any diversion from or bypass of facilities covered by this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage, runoff, or infiltration would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall operate the treatment works, including the treatment plant and total sewer system, to minimize discharge of the pollutants listed in Part I of this permit from combined sewer overflows or bypasses. The permittee shall monitor all overflows and bypasses in the sewer and treatment system. A record of each overflow and bypass shall be kept with information on the location, cause, duration, and peak flow rate. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing bypasses, overflows, and infiltration in the system.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

a. In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or, if such alternative power source is not in existence, and no date for its implementation appears in Part I,

b. Halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Water Protection Branch of EPD.

3. Availability of Reports

Except for data determined by the Director of EPD to be confidential under Section 16 of the State Act or the Regional Administrator of the U. S. Environmental Protection Agency under Section 308 of the Federal Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the Atlanta office of the EPD. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 22(b) of the State Act.

4. Permit Modification

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or

d. To comply with any applicable effluent limitation issued pursuant to the order the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120 (D.D.C. 1976), if the effluent limitation so issued:

(1) is different in conditions or more stringent than any effluent limitation in the permit; or

(2) controls any pollutant not limited in the permit.

5. Toxic Pollutants

Notwithstanding Part II, B-4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition. A draft permit will be provided for review and comments prior to issuance.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Act.

8. Water Quality Standards

Nothing in this permit shall be construed to preclude the modification of any condition of this permit when it is determined that the effluent limitations specified herein fail to achieve the applicable State water quality standards.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Expiration of Permit

Permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by any action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Available Technology Economically Achievable

Notwithstanding Part II, B-4 above, if an applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 301(b)2 of the Federal Act for a pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with such effluent standard or prohibition. A draft permit will be provided for review and comments prior to issuance.

14. The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff; and sludge and waste disposal areas.

PART III

A. PREVIOUS PERMITS

1. All previous State water quality permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Water Pollution Control Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

B. SPECIAL REQUIREMENTS

1. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

2. Any metal cleaning wastes generated will be contained for further treatment or disposal in a manner to permit compliance at time of discharge with requirements listed below. This applies to any preoperational chemical cleaning of metal process equipment also. The treatment and disposal procedures shall be discussed in the bi-annual flow characterization study.

3. The quantity of pollutants discharged in metal cleaning waste shall not exceed the quantity determined by multiplying the flow of metal cleaning wastes times the concentrations listed below. All effluent characteristics shall be monitored 1/week by grab sampling when a discharge is occurring.

Effluent Characteristic	Discharge Limitation (mg/l)	
	Daily Average	Daily Maximum
Total Suspended Solids	30	100
Oil and Grease	15	20
Copper	1.0	1.0
Iron	1.0	1.0

4. Neither free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Director that the units in a particular location cannot operate at or below this level of chlorination. Any necessary demonstration will be submitted to the Director within 90 days of the effective date of this permit. Further, the permittee will develop a system for monitoring and recording total time of FAC and TRC concentrations. The results shall be reported in a suitably concise form beginning with the first scheduled Operation Monitoring Report (OMR) and continuing on each OMR thereafter.

5. In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled by this permit shall not exceed the specified limitations for that source.

6. The Director may modify any effluent limitation upon request of the permittee if such limitation is covered by an approved variance or by an amendment to the Federal Water Pollution Control Act.

7. The permittee shall determine the flow of the various waste streams and submit this determination to the Director once every two years.

8. All sewage treatment plants (STP) must be properly operated and maintained. This applies to 02A Main STP, 02B Coal Handling STP, 02C Unit 1 Temporary STP, and 02D Unit 2 Temporary STP.

9. Every two years, the permittee shall review the water treatment chemicals other than chlorine discharged to State waters. This includes, but is not limited to microbiocides, corrosion inhibitors, and dispersants. These chemicals shall be used and disposed of in accordance with the manufacturers instructions unless other requirements are imposed by EPD.

   As part of the flow characterization study of item 7., the permittee shall submit to EPD a current inventory of all chemicals discharged during the previous twenty-four months.

10. Summary of flow characterization study requirements from preceding pages:

a. Outfalls 04, 05, 06, and 07 stop log leakage flow and effluent characteristics.

b. Metal cleaning waste treatment and disposal procedures.

c. Flow determination of various waste streams.

d. Water treatment chemical inventory.

e. Cooling tower blowdown priority pollutant certification per 40 CFR 423.13 (d) (3).